

Abstract

System and method for creating measurement applications. The system includes a measurement task specifier for generating a measurement task specification (MTS) for a measurement task in response to user input; an expert system for analyzing and validating the generated MTS, and generating a run-time specification (RTS) for the measurement task; a run-time builder for analyzing the RTS, configuring one or more measurement devices according to the RTS, and generating a run-time which is executable to perform the measurement task. The system includes a storage system for storing the generated MTS, the generated RTS, and configuration information for one or more measurement devices. The expert system includes one or more measurement experts which analyze all or part of the MTS and populate complete or partial RTSs. The partial RTSs are iteratively populated by other experts to form complete RTSs. Competing RTSs may be assessed and a final RTS selected based upon user preferences.